

THE GENUS *SKELOSZYGONIA* MALAISE
(HYMENOPTERA: PERGIDAE)¹

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ABSTRACT—The genus *Skeloszygonia* Malaise is removed from the subfamily Paralyptinae of the Pergidae and placed in the subfamily Lobocerinae. The type-species, *S. spinipes* Malaise, is redescribed; a new species, *S. simplicica*, is described; and a key to separate the species is provided. Only males of *Skeloszygonia* are known.

The genus *Skeloszygonia* Malaise (1935) is one of several questionably placed genera in the family Pergidae. It is characterized by enlarged, elongate, "raptorial" hind legs (fig. 1). Malaise (1935) described the genus from 2 males representing 1 species, and placed it in the Cimbicidae. *Skeloszygonia* resembles the Cimbicidae in general habitus, but it lacks the radial crossvein in the fore wing, and is thus in the Pergidae.

Benson (1938) placed *Skeloszygonia* in the subfamily Paralyptinae of the Pergidae. He apparently did not examine specimens, for the paratype of *S. spinipes* lacks a pre-apical tibial spur on the hind tibia, and has a long pre-apical spine on the mid-tibia, and thus keys to the Lobocerinae in Benson's key to the subfamilies of the Pergidae. However, it does not resemble any known genera of the Lobocerinae. Recently, a male of a second species of *Skeloszygonia* was among material sent to David R. Smith (ARS, USDA, Washington, D. C.) from the Los Angeles County Museum. This specimen resembles the Lobocerinae more than does *S. spinipes*; thus, *Skeloszygonia* may more properly be placed in the Lobocerinae at the present time.

Skeloszygonia appears to be closely related to *Loboceros* Kirby, but it is retained as a distinct genus due to the enlarged hind legs. There are 2 species in the genus, *S. spinipes* Malaise and a new species, *S. simplicica*, and both are known only from males.

Skeloszygonia Malaise

Skeloszygonia Malaise, 1935, Entomol. Tidskr. 56:161.

Type-species: *Skeloszygonia spinipes* Malaise. Orig. desig. and monotypic.

The genus *Skeloszygonia* (males) may be characterized as follows: Body shiny, impunctate. Head broader than high, $\frac{2}{3}$ as wide as thorax, broader than long from above; postocular area narrowed behind compound eyes; postocellar area distinct and elevated; clypeus truncate, labrum rounded; antennae 7-seg-

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mented. Prepectus present as narrow upturned flange. Abdomen short, broad, subequal in length to thorax. Tarsal claws simple; hind basitarsus subequal to remaining tarsal segments combined; hind legs greatly enlarged, "raptorial" (fig. 1); hind femora grooved beneath to receive hind tibiae; hind tibiae curved basally and twisted somewhat to allow a close fit with femora when in repose. First abscissa of R₅ present; first submarginal cell small, less than 1/2 as long as third, second twice as long as third; radial cell closed in fore wings and hind wings (fig. 3).

Malaise's (1935) description of the genus holds for both *S. spinipes* and the new species except for the narrow but nonlinear malar space and the spines on the hind femora (fig. 2), which are specific characters for *S. spinipes*.

Skelosyzygonia has been recorded only from South America and may be restricted to that continent. Conde's record (1939) of *S. spinipes* from Texas must be questioned, although an individual may have been introduced and subsequently collected.

Key to males of *Skelosyzygonia* Malaise

- 1. Hind femora with 2 outer and 2 inner spines on ventral surface (fig. 2); hind tibiae strongly curved basally and twisted; antennae clavate (fig. 5); thorax orange; head, abdomen and hind legs beyond extreme base of femora metallic bluish black; wings entirely infuscated brown; hypandrium tapered, narrowly rounded apically (fig. 7); Brazil -----
----- *spinipes* Malaise
- Hind femora simple, with no spines (fig. 1); hind tibiae moderately curved basally, not strongly twisted; antennae subfiliform (fig. 4); body yellow; dorsum of head, mesoscutum, and tip of abdomen black; wings infuscated amber-yellow, black on apical 1/4 of fore wings; hypandrium broadly rounded apically (fig. 6); Peru -----
----- *simplicica* Greenbaum

Skelosyzygonia simplicica Greenbaum, new species

fig. 1, 3, 4, 6, 8, 9

Female: unknown

Male: length, 9.6 mm. Body mostly yellow. Head black above level of antennae; antenna black beyond scape. Thorax yellow with posterior angles of mesoprescutum and mesoscutum black. Eighth abdominal segment and hypandrium black; dorsum of abdomen and median portion of basal plates infuscated brown, more pronounced along posterior margins of segments. Fore and middle tarsi brownish; hind tibiae and tarsi black. Wings amber-yellow with apices and bases of vein R in fore wings black.

Compound eyes straight on inner margins; ocellar basin indistinct; antennae (fig. 4) filiform with first flagellar segment shorter than following 2 combined, apical 4 flagellar segments subequal in length, and apical segment with sensory cup at apex; malar space linear. Mesoscutellum triangular from above, carinate on posterior margin. Hind legs (fig. 1) large, elongate; hind coxae shorter than abdomen; with longitudinal outer depression; hind femora dilated on

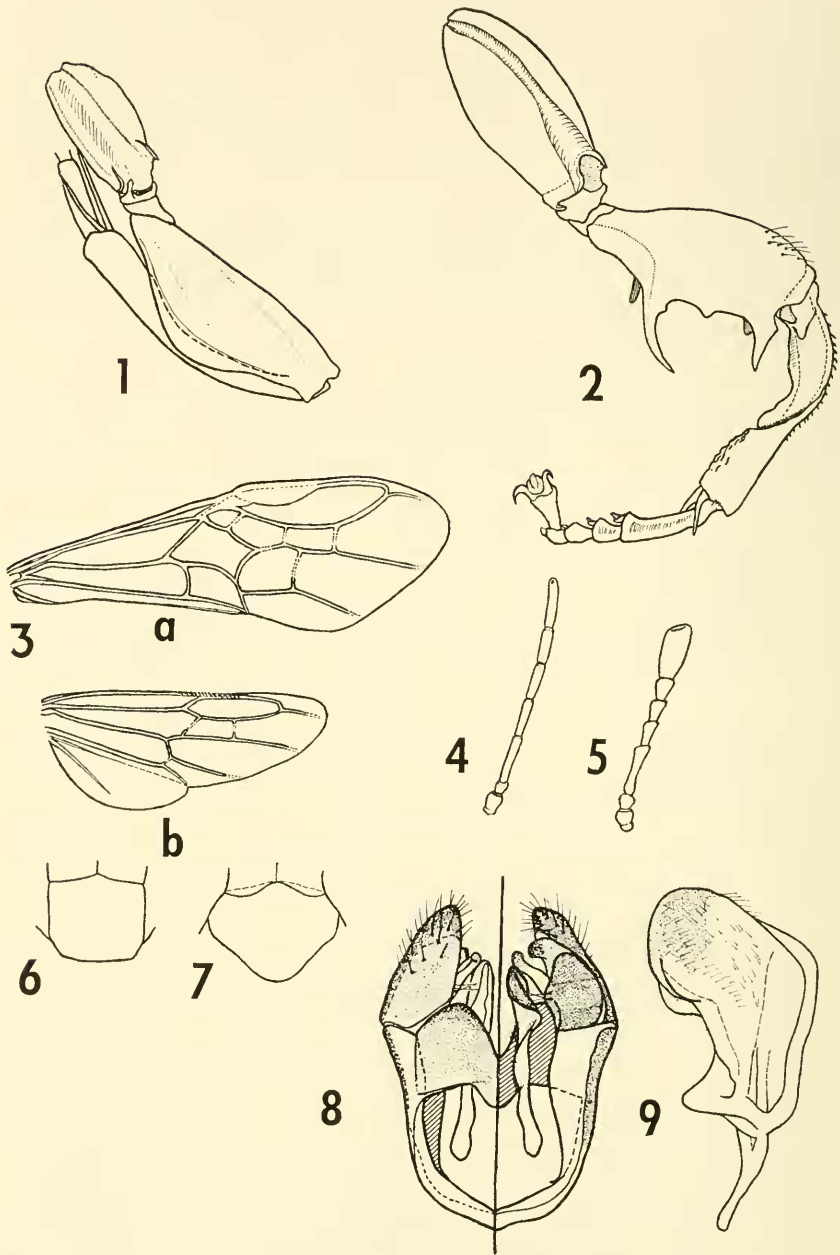


Fig. 1-2. Hind leg. 1, *Skelosyzygonia simplicica* (tarsi not included). 2, *S. spinipes*. Fig. 3a & b. Fore and hind wings, *S. simplicica*. Fig. 4-5. Antenna.

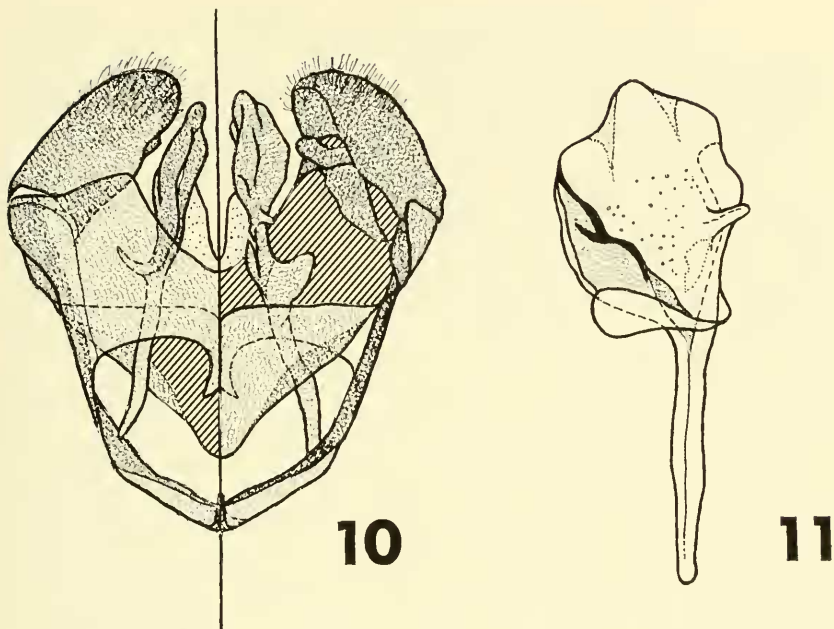


Fig. 10, 11. Male genitalia. 10, Genital capsule, *S. spinipes*. 11, Penis valve, *S. spinipes*.

inner and outer sides but without spines or projections, as long as abdomen; hind tibiae moderately curved, rounded in cross-section, not strongly twisted; hind basitarsi without grooves. Radio-medial crossveins of hind wing strongly divergent (fig. 3a). Hypandrium broadly rounded (fig. 6). Genitalia as in fig. 8-9: penis valve (fig. 9) with virga expanded dorsally, large curved carina in posterodorsal corner, basal shelf projecting dorsally, and stem short, thick, angled near base and tapering toward apex.

Holotype; Male; Pucallpa, 200 m, Loreto, Peru; April 1-9, 1965; coll. J. Schunke. Deposited in the Los Angeles County Museum.

Host, larva: unknown.

Discussion: This species is known from only the type specimen. The color, characteristics of the antennae and hind legs, and the shape of the hypandrium and penis valve may be readily used to separate the males of *S. simplicica* from *S. spinipes*.

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4, *S. simplicica*. 5, *S. spinipes*. Fig. 6-7. Hypandrium. 6, *S. simplicica*. 7, *S. spinipes*. Fig. 8-9. Male genitalia. 8, Genital capsule, *S. simplicica*. 9, Penis valve, *S. simplicica*.

Skelosyzygonia spinipes Malaise

fig. 2, 5, 7, 10, 11

Skelosyzygonia spinipes Malaise, 1935, Entomol. Tidskr. 56:162 ♂; Conde, 1939, Deut. Entomol. Ges. Mit. 9:49.

Female: unknown.

Male: length, 11.5 mm. Head, abdomen beyond basal plates, basal $\frac{1}{2}$ of hind coxae, hind tibiae except extreme base, and hind tarsi metallic bluish black. Antennae, apices of fore and middle tibiae and tarsi black. Otherwise orange with legs yellow. Wings entirely infuscated brown, darker on basal $\frac{1}{2}$ of fore wings; veins brown with axillary sclerites yellow.

Compound eyes weakly emarginate along inner margins; ocellar basin moderately distinct; antennae (fig. 5) clavate with first flagellar segment subequal to following 2 segments combined, second longer than third, third and fourth subequal in length, and fifth (apical segment) as long as first flagellar segment and bearing large sensory cup at apex; malar space narrow but not linear. Mesoscutellum broadly triangular from above, rounded at apex, lacking carina. Hind legs (fig. 2) large, elongate; hind coxae subequal in length to abdomen; with distinct grooves on outer sides, hind femora dilated on inner and outer sides, with 2 short, simple inner spines at each end, 2 large, outer spines—apical spine bearing large basal tooth and basal spine sometimes bearing small basal tooth, and small outer tooth between outer spines; inner and outer spines opposing each other form brace for holding hind tibiae when in repose; hind tibiae strongly curved basally and appearing twisted at apices, crescent-shaped in cross-section at the bases, oval in cross-section near apices; hind basitarsi widely grooved on inner and outer surfaces. Radio-medial crossveins of hind wing subparallel. Hypandrium broad, tapered toward apex, narrowly rounded at apex (fig. 7). Genitalia as in fig. 10–11: penis valve (fig. 11) with virga subrectangular, protruding apically forming 4 lobes, short projection from mid-dorsal surface of virga directed dorso-apically, ventro-lateral carina extending obliquely from base of virga to ventral-most apical lobe, basal shelf large, curved, projecting ventrally, and stem long, straight, tapered toward apex.

Holotype: Male; Province of Rio de Janeiro (Brazil); border of Minas Gerais; Fr. Wiengreen; I.XI.1894. Located in the Zoological Museum, Hamburg, Germany.

Paratype: Male; same data as for holotype. Located at the Entomologiska Riksmuseet, Stockholm, Sweden.

Additional records: BRAZIL: São Paulo, Jabaquara; 14.XI.41; Coll. H. Zellibor (2 specimens, Entomol. Riksmuseet); Nova Friburgo, Est. Rio de Jan., 900 m.; 10-30. I. 46; Coll. P. Wygodzinsky (2 specimens, Entomol. Riksmuseet).

Host, larva: unknown.

Discussion: This species is known only from the types, both collected in the Province of Rio de Janeiro, Brazil, and 4 additional specimens. Conde (1939) reported a specimen from Texas, but this is doubtful as the subfamily Lobocerinae is known from only Mexico, and Central and South America. The characters listed under *S. simplicica* will readily separate the males.

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